Electricity on the Farm

A MONTHLY MAGAZINE FOR THE UP-TO-DATE RURAL FAMILY

10 CASH PRIZES will be awarded for the best titles to the above picture. *(See inside back cover for rules.)*

AUGUST
1 9 3 3

Believe It or Not!

Ripley

A DETROIT HOUSEWIFE COOKED
A DINNER FOR SIX ON HER
HOTPOINT ELECTRIC RANGE
WHILE SHE WAS PLAYING BRIDGE
10 MILES FROM HER HOME!

THE DINNER WAS
READY TO SERVE THE
MINUTE SHE ENTERED THE HOUSE

FARM women may not care to spend their spare time playing bridge, but the experience of the Detroit woman whom Mr. Ripley picturizes above tells farm women how to find time for other duties besides "pot watching." The Hotpoint Electric Range is automatic. You can cook an entire meal in the oven without opening the door during the cooking process. An electric clock turns the current on, the meal cooks, and the clock turns the current off again at the time which you set on the dial.

The time has passed when farm women were only "cooks." The Hotpoint range with its accurately controlled, clean, flameless electric heat does a better job of cooking without constant watching than old-fashioned ranges did when women stood over them for hours.

Have more time for other duties or pastimes. Enjoy a clean, spotless, cool kitchen. Serve nourishing foods with the essential minerals and vitamins cooked in, instead of boiled out. Go to your power company today and learn the economy of Hotpoint electric cookery.

Hi-speed Calrod heating coils available in all Hotpoint Ranges.

Hotpoint Electric Ranges are surprisingly low in price and are easy to buy. Ask your power company or electrical dealer about the partial payment plan.

ELECTRIC Hotpoint RANGE

Edison General Electric Appliance Co., Inc., 5610 W. Taylor Street, Chicago

August, 1933

Electricity on the Farm

Vol. 6. No. 8

IN THIS ISSUE

Intelligent Plans Bring Increased Profit

BY TRUMAN E. HIENTON

Carefully kept farm records helped Wm. Y. Hartough, a farmer of Wabash County, Indiana, place his farm on a more profitable basis, as related by the author on page 4. And electricity played no small part in the plans developed on the Hartough farm for its universal application to farm and household tasks.

Getting Up Steam

BY D. B. LEONARD

Electrically generated steam is finding use on dairy farms for sterlizing utensils. Mr. Leonard, on page 6, describes an electric-steam sterilizer developed and used on the Pacific Coast.

The Porous Canvas Hose Irrigation System

BY H. J. GALLAGHER

Irrigation has saved many crops during dry seasons for farmers fortunate enough to own irrigation equipment. On page 8 the author describes an inexpensive method of obtaining a suitable irrigation system by employing porous canvas hose.

When You Mix With Machinery

BY VERA B. MEACHAM

The application of electricity to the preparation of foods saves labor. The author on page 10 describes some of the electrically operated units now available for easing as well as speeding up the preparation of edibles.

Putting Up Green Feed the Easy Way

BY J. C. SCOTT

Ensilage cutting and silo filling has heretofore been an expensive operation for the farmer. But, the 5 H. P. motor has simplified this problem as well as reduced the labor cost. Gratifying results have been obtained by a Washington dairyman as told by Mr. Scott on page 12.

Regular Department Features

Questions and Answers, page 13; Electrical Housekeeping, page 14; On the Air, page 16; What's New, page 18.

EDITORIAL

AGRICULTURE comes back! Prices of some farm products are today twice as high as they were the first of the year; the trend of all is upward. Maybe wheat, cotton and other commodities have advanced more rapidly than justified by present conditions, as claimed by some authorities. Even if they have, the very machinery designed to stabilize these prices in 1934 and thereafter has only been started. The farm relief legislation, with its crop reduction and other helpful features, is being put into motion with vigor and speed.

Many farmers, for the first time in four years, are planning purchasing new equipment. Farm indebtedness is beginning to drop.

To those farms not having electric service, connection to a central station system, with all benefits made possible thereby, represents the most valuable improvement conceivable. Relief from drudgery and the making of farm household truly a modern home for both young and old are but two of the many benefits which result.

Farmers already enjoying central station service can find many new uses for that tireless worker, electricity, employing farm equipment especially designed for electric drive.

Electricity eases the burdens around the farm, shortens the hours and brightens the home. Truly, there is no other means by which so much can be accomplished through a like investment.

THE PUBLISHERS.

Issued Monthly by

CASE-SHEPPERD-MANN PUBLISHING CORP.

Editorial-Executive Offices: 24 West 40th Street, New York

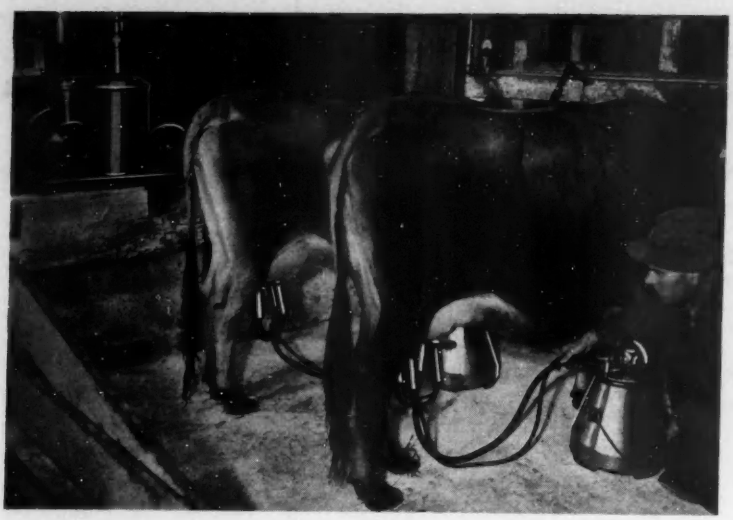
KARL M. MANN, *President* — I. H. CASE, *Vice-Pres. and Gen'l Mgr.*

FRED SHEPPERD, *Editorial Director* — K. H. GORHAM, *Advertising Manager*

CHICAGO: 6 No. Michigan Ave.—W. S. CLEVENGER, Western Manager: L. M. ROCHE, Western Representative

Subscription price, 75 cents per year; single copies, 10 cents.

Contents Copyrighted 1933 by Case-Shepperd-Mann Pub. Corp.



Electric milker purchased by Mr. Hartough in 1932 to solve the labor problem in milking his enlarged herd.

INTELLIGENT PLANS BRING INCREASED PROFIT

By TRUMAN E. HIENTON

DOWN in Wabash County, Indiana, William Y. Hartough farms 92 acres of his own and rents about 90 more. This makes a typical Indiana farm with a small herd of dairy cows, a flock of chickens, and six or eight brood sows, raising two litters of pigs a year. Two horses and a two-plow tractor do the field work on the 157 tillable acres that produce corn, wheat, oats and clover hay.

One thing that makes this farm unusual, though, is the fact that Mr. Hartough carefully keeps a set of farm record books under the guidance of the Farm Management authorities of Purdue University. Moreover, in 1931 when 762 Indiana farmers keeping similar records lost an average of 1.8% on their investment, Mr. Hartough showed a return of 1.9% on his investment of more than $12,000. This return was in addition to an allowance of $500 for his own labor.

Decides To Enlarge Herd

At the end of 1931 the results were summarized and studied by J. C. Bottum, Purdue farm management specialist. Then he and W. K. Delaplane, county agent of Wabash County, called on Mr. Hartough to make plans for 1932. They agreed that it would be better for him to secure additional livestock and feed the grain he produced instead of selling it.

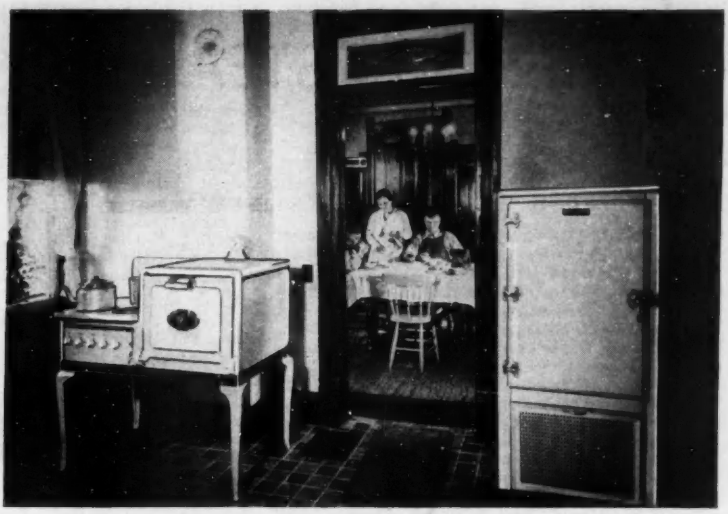
It was then that electricity became the key that unlocked the door to greater profits.

Ten or more cows to be milked increased the labor problem. So in April, 1932, the electric milking machine shown in the picture was put into operation. A separate meter for it showed that it took only 15 kw. hrs. a month to milk this herd. But the income from dairy products was $258 more in 1932 than in 1931, and this in spite of lower market prices.

Lights Increase Egg Production

Mr. Hartough did not use electricity especially in pork production, but he did market sixteen litters of pigs weighing over eleven tons in 1932 as compared with fourteen litters weighing nine tons in 1931. Hog prices were so low in 1932 that the eleven tons of pork lacked more than $200 of bringing as much as the nine tons brought the year before, however.

It was the poultry that helped make up this loss. The size of the flock was increased, but the income from eggs increased a great deal more. Mr. Hartough attributes this to the greater use of lights for the pullets during the winter as well as to the introduction of a better strain of birds. During the winter when the most eggs



The electric range and refrigerator give Mrs. Hartough more time to work in the garden and with the poultry.

were laid, the pullets were given extra light from November first to March first.

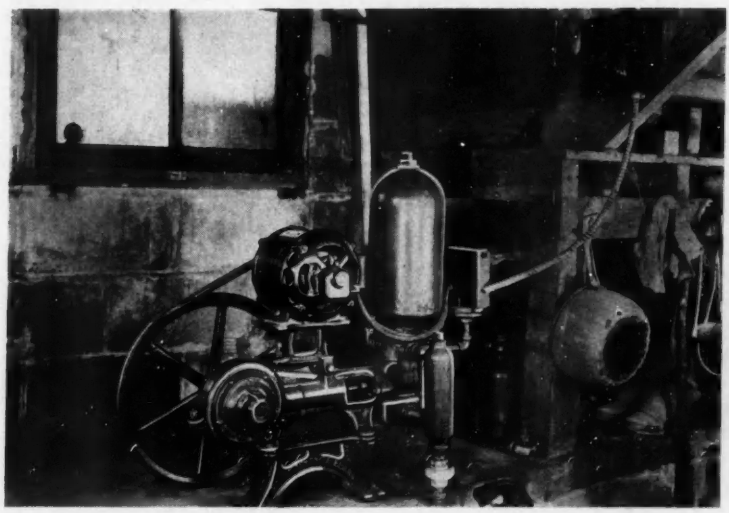
Electricity Opened Way to Other Savings

Besides stimulating egg production and reducing time and labor in milking, electricity opened the way to other savings. A motor on the separator used only 13 kw. hrs. in a whole year, about 1 kw. hr. for separating sixty times. Another motor pumps hard water for the livestock and the kitchen, as well as for the flush tank in the bathroom, while a third one furnishes soft water for the house.

Mrs. Hartough finds more time for poultry and for garden because an electric range and electric washing machine in addition to the smaller appliances save so much of her time and strength in the house. Besides she has an electric refrigerator that not only stores the food but cools and holds the evening cream for delivery next day.

The result of careful management and all this electric help appears most strikingly in Mr. Hartough's records for 1932. Despite conditions even less favorable than in 1931, this farmer almost doubled the return on his investment. In 1931, you remember, his return was 1.9%, which was a great deal better than the average. In 1932 practically the same investment yielded 3.7% in addition to a labor allowance of $500.

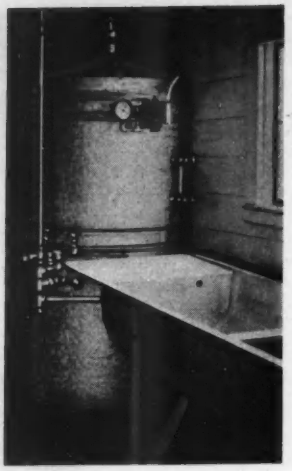
In the readjustment of farm practices to meet changing conditions, it is significant that electricity finds an important place as an economical source of power, light, and heat.



Automatic water pump in basement of the Hartough home furnishes soft water under pressure.

GETTING UP STEAM

By D. B. LEONARD



Large sterilizer and sink at Pendleton Dairy, Pendleton, Oregon.

"WHAT the dairymen want is live steam under pressure," said Homer Noland, electrical manufacturer, as he observed tests being conducted on a number of electric dairy sterilizers by a western power company. And live steam under pressure is what the investigators achieved with the development of a electric-steam dairy sterilizer.

Twelve are already in use on dairy farms, supplied by this particular power company, where they are giving satisfactory service to the dairymen owning them.

"That boiler is the most convenient thing we have on the ranch," said Guy Knapp of the Pendleton Dairy. "It operates very economically and saves over an hour's time each day compared with a fuel fired water heater."

Pleased With Results Obtained

W. B. Phillips, of Freewater, Oregon, produces Grade B milk under the provisions of the U. S. Standard milk ordinance. "I wouldn't take $500 for that sterilizer if I couldn't get another one like it," said Mr. Phillips after the sterilizer had been installed in his milk house for a short time on trial.

Dairy inspectors, too, welcome these new sterilizers because they help dairymen to produce high quality milk with low bacteria count. "Its freedom from dirt and odors and its compactness of design permits its installation inside the milkhouse washing room," said John B. Drake, Dairy Inspector at Walla Walla, when discussing the sterilizer.

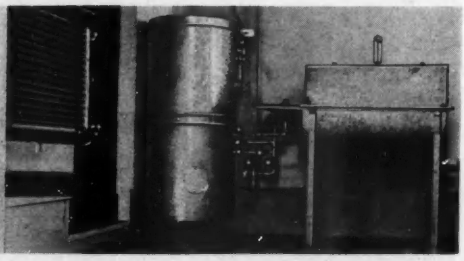
The boiler is made of steel boiler plate and has four inches of insulation around it in a sheet iron jacket. It stands on three angle iron legs which facilitate leveling the boiler during installation. An ordinary immersion type electric heater is used to heat the water, with a minimum size of 600 watts for small dairies sterlizing tinware, and 750 watts to 1000 watts for larger installations in bottle dairies. 1200 watts is installed on the largest boiler now in service and provides steam capacity for sterilizing approximately 30 cases of bottles daily. An adjustable pressure switch controls the circuit to the heater and cuts off the current at a given steam pressure, which insures safety of operation at all times. The boiler is also equipped with a safety valve which releases steam at 100 lbs. pressure.

A water gauge and pressure gauge enable the dairyman to keep the water at the proper level and to know the amount of steam pressure available for his use.

Design To Meet Requirements

In a normal cycle of operation a dairyman would have 50 to 80 lbs. of steam pressure every morning which had been generated over night. This head of steam would enable him to draw off wash water for washing equipment and still leave a sufficient quantity of steam to sterilize his utensils and bottles. The quantity of steam available for sterilization depends on the size of the boiler and amount of pressure, and each installation must be designed to meet the particular requirements. After the equipment is sterilized and the steam pressure has been exhausted or reduced to a low reading, water is injected into the boiler to bring the water level in the glass to its normal position. The electric heating element operates automatically through the pressure switch and will recuperate

New milkhouse on the W. B. Phillips dairy farm at Freewater, Oregon.



Sterilizer and sink with steam compartment cover on the M. O. Beauchamp dairy farm.

steam pressure by the next milking period when additional hot water and steam will be needed.

Low Operating Costs

"How much does the electricity cost each month?" is a common question asked by dairymen who generally guess that it must be quite expensive to operate. But it is very inexpensive because the small heater operating for long periods can take advantage of low water heating rates wherever they are offered. The dairymen now using these boilers claim that steam can be generated electrically cheaper than with a fuel fired boiler, and are unanimously agreed that the electric boiler is much cleaner and more convenient in the milkhouse. It takes soot, smoke and fire hazard away from the barn.

Controlled Steam Sterilizer

The controlled steam sterilizer is a cabinet type unit with front opening doors, and racks for holding utensils. It is equipped with space heaters in place of immersion elements. Enough water is introduced either on or with the utensils to just fill the cabinet with steam when heated. Hence the name, "Controlled Steam Sterilizer." Utensils are heated in the cabinet by heated air currents rather than by the condensation of steam. Heavy insulation of the cabinets, together with the limiting of the amount of water evaporated, greatly reduces the wattage of heating elements and the power consumption. The process is controlled by a thermal switch which cuts off the power at a predetermined temperature.

In operation the utensils are placed in the sterilizer wet from the rinse water. When filled, the sterilizer door is closed and the heating switch turned on. No further attention is needed. When the sterilization is completed the utensils are dry and the power cuts off automatically. The utensils remain in the cabinet, free from dust, until again needed.

Sterilization of Utensils by Controlled Steam Method Practical

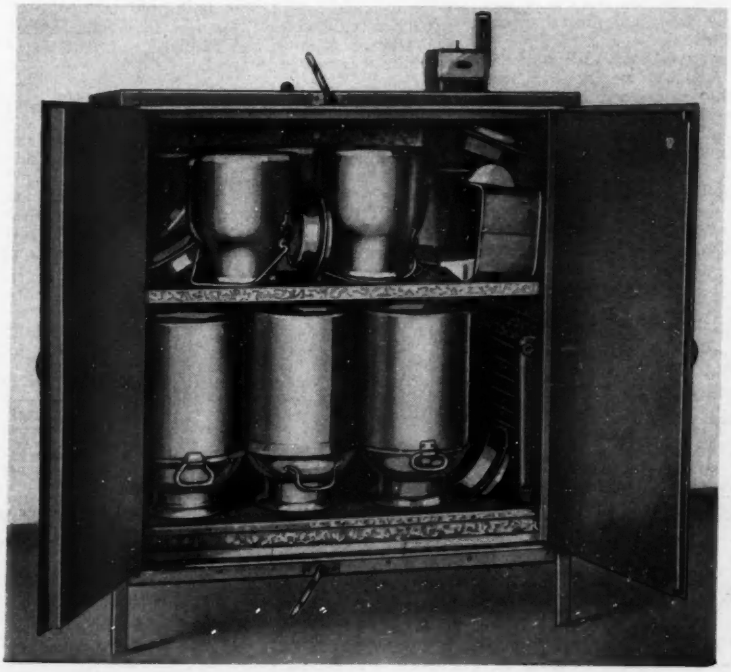
Regarding the results of using this type of sterilizer (which is known by the trade name of Esco), the New York State Agricultural Experiment station, in a recently issued bulletin, says:

Results in sterilizing dairy utensils comparable to those obtained with live steam were secured in a dry heat sterilizer, generating water vapor from the wet utensils.

A temperature of 212° F. maintained for 15 minutes produced either with steam or dry heat rendered wet utensils equally free from bacterial contamination.

A temperature of 200° F. maintained for at least 10 minutes was required in moist air sterilization by dry heat to render utensils sufficiently free from organisms for practical use. This temperature and time were sufficient to kill all bacteria of the colon-aerogenes group, to dry the utensils, and to reduce the bacterial contamination to insignificant numbers.

"Sterilization" by the application of dry heat to wet utensils appears to be a practical method of sterilizing dairy farm equipment on farms producing high-grade milk. It eliminates the need for steam and dries the utensils.



The Controlled Steam Sterilizer is equipped with space heaters which vaporize the water on the moist utensils. A thermal switch cuts off the current when the predetermined temperature for which it has been set is reached.

The porous canvas hose between rows of potatoes. Water oozes uniformly the entire length of the hose.

THE POROUS CANVAS HOSE IRRIGATION SYSTEM

By H. J. GALLAGHER

DURING the past three years, Mr. O. E. Robey, of the Agricultural Engineering Department of Michigan State College, has conducted some very interesting and highly valuable experiments on irrigation. Mr. Robey proceeded with his work on the conviction that it would be profitable to irrigate many of the ordinary farm crops if the irrigating system were simple, cheap and easy to use.

The water was applied by means of a porous canvas hose that was laid on the ground between the crop rows. One end of the hose was tied around the water supply pipe, and the other end of the hose was tied in a knot.

When the water is pumped into such a layout the canvas is tight enough to let the hose fill to its entire length. But when the pressure builds up to about four pounds per square inch, the water oozes through the pores of the canvas at a very uniform rate the entire length of the hose. The amount of leakage through the hose depends principally upon the water pressure, although the weight of the canvas and the irregularities of the ground must also be considered.

When this system was used to irrigate potatoes there was an increase of 122 bushels per acre as compared with unirrigated plots of similar size in the same field. Irrigation water, the equivalent of one inch of rainfall, was applied each week for six weeks. The applications were made between August 4 and September 10. The potatoes were planted May 30 and dug October 10. During that period the rainfall was 12.7 inches.

The canvas hose was laid in the row and allowed to seep out the desired amount of water. Lengths of hose of 40 rods were used without difficulty, and water was uniformly carried over ground irregularities three feet in height. After one row of potatoes had received sufficient water the hose was moved to another row.

Canvas Hose System Inexpensive

The canvas hose system of irrigation does not require a large outlay of cash. Ordinary 8-, 10- and 12-ounce duck can be purchased by the bolt and cut length-wise into 3 or 4 strips. The strips are then folded in the center and the edges stitched together with the seams on the outside. The cost is only a few cents a foot. Porous canvas hose is

Table No. 1

	Rainfall inches	Irrigation: No. applications	Irrigation: Inches	Total Rainfall and irrigation	Yield in Bushels per Acre: No. 1	No. 2	No. 3	Total
Plot No. 1:								
Irrigated	11.71	6	6	17.71	249.2	31.68	22.4	303.28
Unirrigated	11.71	..	..	11.71	129.64	35.84	15.76	181.24
Increase	....	..	..	....	119.56	—4.16	6.64	122.04
Plot No. 2:								
Irrigated	10.51	4	4	14.51	80.895	41.999	17.73	140.602
Unirrigated	10.51	..	..	10.51	22.385	35.436	16.25	74.07
Increase	....	..	..	....	58.510	6.563	1.48	66.532
Plot No. 3:								
Irrigated	10.51	4	4	14.51	145.018	31.883	9.498	196.080
Unirrigated	10.51	..	..	10.51	28.496	28.677	11.435	68.607
Increase	....	..	..	....	116.522	3.206	—1.937	128.483
Plot No. 4:								
Irrigated	14.66	7	7	21.66	204.40	18.31	6.69	229.4
Unirrigated	14.66	..	..	14.66	101.15	19.36	4.36	124.81
Increase	....	..	..	....	103.25	—1.05	2.33	104.53

also being manufactured on a commercial basis.

One of the difficulties experienced with damp canvas is a bacterial growth that rapidly damages it. To avoid this damage the hose may be soaked in a solution of asphalt paint thinned with kerosene and gasoline, then wrung through an ordinary laundry wringer. Annual applications of this treatment with thorough drying before the hose is placed in winter storage should insure five or more years of service.

In connecting two lengths of hose together a short pipe was inserted into the two hose ends and the ends bound around the pipe.

This system of irrigation admirably answers the requirements of the farm garden. Water could ordinarily be piped from the pump to the garden and distributed down the rows through the hose. The hose could be set in a new location each day and the irrigation done at night to avoid interfering with the farm water supply during the day.

The principal requirement for proper irrigation is a large quantity of water. Water should be applied at the rate of one inch or more over the entire area at each application. Seldom is it desirable to use a smaller amount. It takes 27,154 gallons to cover an acre one inch deep. A farm pump with a capacity of 300 gallons per hour operating 10 hours would irrigate .1 of an acre, or one acre in 10 days. Consequently, one acre would be the limit for a 300 gallon pump as every 10 days the process should be repeated. On large areas the pump and other equipment should have a capacity of 3,000 gallons per hour or more.

Table No. 1, as published on page 8 gives data of two of the experiments in irrigating potatoes. It is important to note that the quality of the potatoes as well as the quantity was improved on the irrigated plots. From a commercial standpoint this furnishes a good measurement of the profits to be derived from irrigation. From the farm garden viewpoint the value of quality produce in abundance is difficult to estimate.

Where electric power is used for pumping it requires approximately 30 K. W. H. to pump one acre-inch of water; at 3 cents per K. W. H. it would cost 90 cents to water an acre once, or $9.00 for the 10 applications that would normally be enough for the season.

ALFALFA SEED PRODUCTION

Dr. E. N. Bressman,
Associate Professor of Farm Crops
Oregon Agricultural College

ALFALFA will not produce seed in many of the humid sections of the country, and even regions which should be good alfalfa seed producing areas because of rather dry climatic conditions do not always produce a profitable crop of seed. The alfalfa seed producing areas are chiefly in Utah, Idaho, Montana, the Dakotas, Nebraska, and Kansas, with some seed also produced in Canada. There are other scattered areas, but the states mentioned are the chief producers of alfalfa seed.

The alfalfa flower tightly encloses the reproductive organs, and the flower does not voluntarily open if climatic conditions are not just

(*Continued on page* 12)

Arthur Huntington (left) of Cedar Rapidt, Iowa, newly elected president of the American Society of Agricultural Engineers, sightseeing on the Purdue University campus with Prof. William Aitkenhead, chief of the Purdue Agricultural Engineering Department. The buggy in which they are riding is more than 100 years old and is a prize possession of the Purdue Agricultural Engineering museum.

When you MIX WITH MACHINERY

By VERA B. MEACHAM

WHEN you mix with machinery, you are introducing no new and revolutionary methods to your kitchen worktable. You are just turning over to electricity the jobs that we women have been doing by hand since cooks began. Somebody with a head for figures has ferreted out that three-fourths of our recipes call for mixing, beating, chopping, or slicing. An electric mixer will do all of these things, and do them more quickly and more thoroughly than we have been doing them by hand.

This machine gives crisp slices for cool salads without muss or handling.

And while it is doing them, we can busy ourselves with other things we have to do, and so cut down the hours we need to spend in the kitchen.

The mixers do many jobs better than we can, too. Their thorough beating certainly makes ingredients go farther. And to the fastidious housewife there is a great satisfaction in preparing the food untouched by hands.

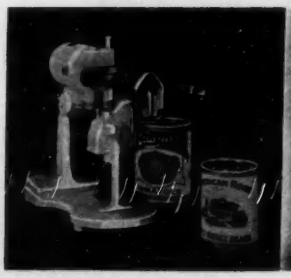
Do a Variety of Jobs Well

But mixing, whipping, beating, and for the larger machines, kneading yeast doughs, just begins their work. They run tools for chopping and slicing and shredding, for mixing drinks, for grating cheese and nuts. They open cans, grind the knives and polish silver. They grind coffee and extract fruit juice. One of them even has a coffee roaster and an automatic timer for it, so you can put in your green coffee, roast it exactly the right length of time, and serve it minute fresh from oven to pot.

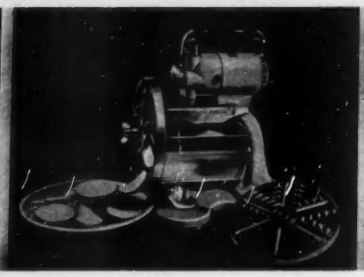
Two of the mixers have added potato peeling to their list of accomplishments. On one the peeler is a cylindrical can with a partially closed top, and a spout low on one side. There is a standard at one side that holds the motor.

This can is lined with a rough abrasive and

Opens can in just a jiffy.



Shreds or slices, as you wish.

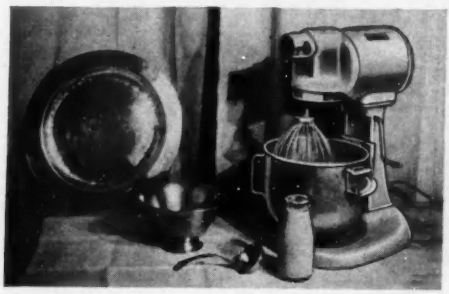


A beautiful job of peeling potatoes.

as it spins it rubs the potato peeling off. It will wash and peel eight to ten potatoes in two minutes by your clock. It can be used anywhere, on the drainboard of the sink or on a handy kitchen chair. It is easy to run it. You just put the potatoes in, and fill the top of the container with water. The water washes the potatoes and carries the peeling out of the spout, into the sink or a pail. The can is easy to rinse out clean.

I saw the other peeler first at a club meeting not long ago. When the man who was showing us his mixer brought it out and held it up for us to see, I had no idea what it could be. Its slender rods and joints and hinges doubled around like a Sam Goldberg invention. Then he put the longer, thicker shaft into the socket on the motor so a light, rigid rod stuck out straight ahead of it. Like a conjurer pulling a rabbit out of a hat, he flourished a potato before us and thrust it onto that rod. He pushed the switch on the motor and that gadget got into action. The knife blade began neatly at the inner end of that potato and took off the peeling

The seven-minute frosting can be made in four when you set a power mixer on the job.



A touch of a button gives a great bowl of fluffy whipped cream.

in one continuous strip. Over hummocks and into hollows it went, peeling thoroughly, but without waste.

Then just because we were all so excited about it, he went on, when the peeling was off and cut the potato itself into slender strips for shoe string potatoes.

This same mixer has safety attachments for the food chopper and vegetable slicer so it is impossible to catch your hand in them. No matter whether the switch is "on" or "off," neither the slicer nor the chopper will start till they are safely covered.

One manufacturer of mixers has made a complete line of hand operated kitchen tools, slicer, chopper, potato ricer and coffee grinder to fit onto the standard that holds the motor for his mixer. For of course the motor comes off on most small mixers, so they can be used at the stove when needs arises, as well as on their own sturdy standards.

Combination mixer and fruit juice extractor.

Alfalfa Seed Production

(*Continued from page* 9)

right. Some investigators believe this is the reason alfalfa fails to produce seed. Therefore, they have artificially tripped the flowers so that the reproductive organs are released. There is no doubt that the opening of these flowers increases the seed production. There have been very many careful experiments carried out to show this. With artificial tripping the chances of cross pollination are greater. At any rate there is more seed, and that is what most growers desire.

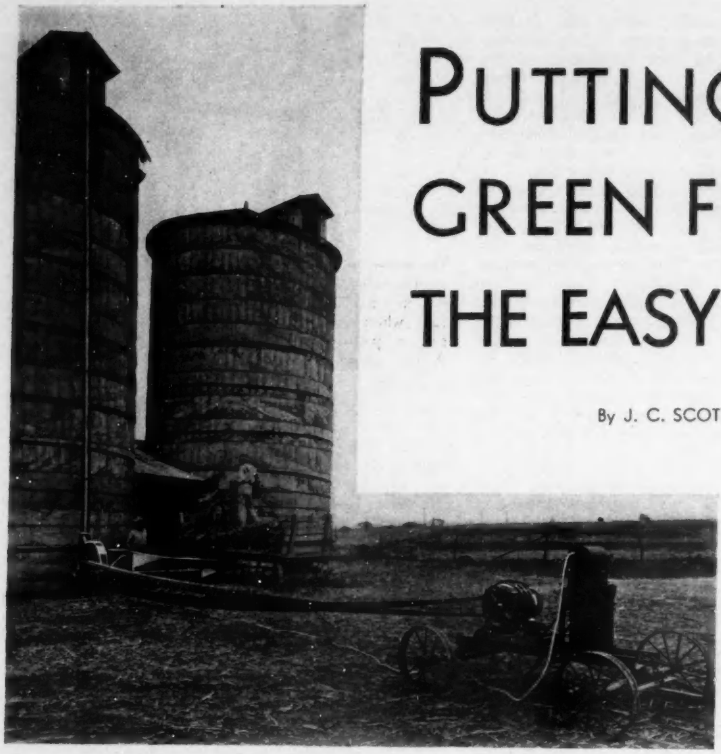
As yet there is no good method of artificially tripping alfalfa flowers. Wind machines of various design have been suggested. Some seed growers run a wagon or buggy over an alfalfa field to produce motion of some kind and cause the flowers to trip. It has been observed that when alfalfa flowers are tripped they do not fall off so readily and are not subject to injury by the weather so quickly as when they are not tripped.

Dry, windy weather is the most favorable for the setting of alfalfa seed. Under these conditions there appears to be more tripping of the flowers and less falling off at the blooms. Rather severe environmental conditions are favorable to the setting of alfalfa seeds; that is, poor soil conditions, dry weather, high winds, thin sands, and poor vegetative growth are all associated with the developing of alfalfa seed.

There appears to be a splendid opportunity for someone to develop artificial methods on a large field scale for making alfalfa flowers trip and release their reproductive organs so that they will set more seed.

PUTTING UP GREEN FEED THE EASY WAY

By J. C. SCOTT



A portable motor and silo filling set-up such as is employed on the Robert Guitteau farm near Snohomish, Wyoming.

DAIRYMEN, interested in lengthening their green feeding season, and cutting down the labor costs connected with cutting it, will be interested in what Mr. Robert Guitteau, dairyman near Snohomish, Washington, has to say about the 5 h.p. portable farm motor.

"I use green corn," says Mr. Guitteau, "to supplement my pasture from September until heavy frost, which is generally the middle of November, then kale until about the first of February, and ensilage until time for pasture in the spring, with a few beets to fill in if the kale is frozen for a few days.

"For cutting the green feed and the ensilage I use a 13-in. ensilage cutter driven by a 5 h.p. electric portable motor.

Current Consumption Low

"I feed about 50 cows," Mr. Guitteau continues, "and the actual cutting of a large load of corn every day requires 10 to 15 minutes with a power consumption of 15 k.w.h. per month. Also it should be remembered that my barn and feeding floor are high off the ground so I have to elevate this feed about 16 feet. It costs a little bit more to cut this kale."

I had heard considerable about what Mr. Guitteau is doing with a 5 h.p. motor and could hardly believe that he could put a load of silage into a 30 foot silo with a 5 h.p. electric motor in 10 minutes, but that is exactly what he has accomplished.

Mr. Guitteau advises, "Filling a 30 foot silo with a 5 h.p. motor driving a 13 inch ensilage cutter is easy providing conditions are right and the cutter set-up is right." When asked just what he meant by the statement "conditions must be right," Mr. Guitteau explained, "Well, first the voltage and wiring conditions of the farm should be checked by the power company, to see that the motor will operate correctly. Second, power transmission from the motor pulleys to the cutter should be through a very thin flexible belt capable of delivering all of the power of the motor over small pulleys at high speeds. To accomplish this I used a 5½-inch Goodyear Compass Cord belt 10 feet from center to center.

Keep Knives Sharp and Properly Set

"The third condition—the cutter clearance must be close; that is, the fan blades must fit the housing with preferably not over ⅛ inch clearance at the base. The cutter bar should be sharp and free from nicks. The knives must be sharpened every half day and set as closely as possible to the cutter bar without hitting.

"The silo pipe must be straight to cut down friction losses.

"Fourth—the speed of the cutter must be slowed down to 400 to 425 r.p.m. for a 30 foot lift."

One would naturally suppose that Mr. Guitteau's cutting machinery was new. However, it did not look so, and I asked him about this. His answer was, "No, the ensilage cutter is about 10

(*Continued on page* 15)

Questions and Answers

Conducted by H. J. GALLAGHER

Question: *Is there any difference in the amount of current used by different motors developing the same power? What effect has the age of the motor upon energy consumed? Is a rebuilt or second hand motor as good as a new motor?*

L. G. THORP, Sunfield, Mich.

Answer: The age of a motor has no direct relation to the amount of current consumed in producing the rated h. p. of the motor, providing the motor has not been injured by too great or too prolonged an overload.

There is some difference in the amount of current consumed by motors of different makes in producing the same amount of power. This difference is very little and is caused by a difference in construction and operating characteristics of the different motors.

A second hand motor may be as good as a new one, depending upon the care the motor has been given and the kind of work it has been doing. The purchase of a second hand motor is like the purchase of a second car, the honesty and dependability of the seller should be unquestionable or the motor should be carefully examined and tested.

In testing a single phase repulsion-induction motor, it should be plugged without load into a circuit that would insure sufficient current under proper voltage; the motor should start promptly and rapidly reach running speed. If the start is sluggish, there is something wrong with the motor. The next test would be the ability of the motor to bring rapidly a 200% overload up to induction speed. A repulsion-induction motor without a high starting torque is an inferior motor.

A motor can be rewound so it is as good as new, but a good rewinding job requires skilled labor.

Question: *I have been reading your little magazine for some time and enjoy it very much. Since I have been reading it I have not seen anything about making ice cream on the farm. Ice cream seems to be one of the products that has not come down in price.*

Do you think it practicable to make ice cream on the farm? How much electric equipment would a farmer need to make ice cream? Having a herd of 12 cows 300 lb. butter fat per cow per year? How many K. W. H. would it take to run the needed equipment? How large floor space for the equipment?

If you have a bulletin on ice cream making, please send me one. What would be about the cost of ice cream equipment? If you have any other device on this subject, please send it.

F. L. C.
Galva, Illinois.

Answer: I would refer you to information published by the Michigan State College, E. Lansing, Mich., on ice cream making.

Your problem is one on which I can render very little assistance. In general, the problem may be thus analyzed: What is your local market for ice cream? In the case of a roadside stand in a good location, your output would exceed the most optimistic expectation.

What are your state laws regarding the manufacture and sale of ice cream? In Michigan the production of more than fifty gallons of ice cream per year necessitates a large investment in equipment including a pasteurizer and recording thermometers. The total investment for necessary equipment would approximately be $5000, which, of course, would be out of the question for a herd of 12 cows unless a quantity of cream was purchased from neighboring farmers.

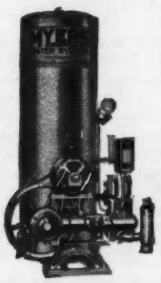
My advice in this matter would be to consult with members of the Dairy Husbandry Division of the University of Illinois to learn of the regulations effective in your state and the size herd they would recommend in a venture of this kind. I would then visit a number of the smaller ice cream manufacturing plants and study their problems of operating costs, the equipment in use and the factors affecting distribution.

Question: *Will you please answer me this question? How can I make an electric motor from a model T Ford starter that will run off of 110 volt alternating current?*

KENNETH WALTEMYER,
R. 2, Red Lion, Pa.

Answer: To convert a D. C. automobile starting motor into an A. C. motor would be practically the same as building an entirely new A. C. motor.

Before You Buy ANY Water System



MYERS prices today are low. Yet Myers has never built a "bargain" water system. See this dependable, world-famous line—at your Myers dealer's. Write us for his name and free booklet.

The F. E. Myers & Bro. Co.
361 Fourth St. Ashland, Ohio

MYERS Self-Oiling Water Systems

ELECTRICAL HOUSEKEEPING

Conducted by
GAIL MEREDITH

These straight-sided dishes have good tight covers.

SAVING THE MICKLES

SOME friends of mine were having a party the other night. The porch light welcomed us as we turned off the road toward the house, and remained burning, forgotten, long after every one had come in.

Now this last year all of the family has been occupied in the well nigh universal game of looking at both sides of its pennies before it spends them. One of the ways they have sought to save has been to make sure that no unused lights were burning in empty rooms. So keeping down the light bill has come in for considerable discussion.

When the party was well under way, Dickie, the three year old grandson, wandering from room to room, discovered that the porch light was on. He dragged his little stool over to the wall and climbing up pushed the switch off.

When he got down he hurried sternly over to his grandmother.

"Who dat somebody wastin' our light bill?" he demanded, accusingly.

If you cook with an electric range, you, like Dickie, are probably on the lookout to avoid wasting your "light bill." The way you run your stove makes a vast difference in the cost of using electricity for fuel. Keeping the use of current down to the kilowatts that actually do the cooking is not niggardly skimping; it is merely good judgment, and shows you quickly how flexible and economical a fuel it really is.

The ways to do it are so simple that you have probably worked out most of them for yourself. But just in case you haven't, and you would like to be thrifty, here they are.

The first thing to do, and probably the most important, is to study the manufacturer's directions for running your range. The men who made that stove have worked, year after year, trying to make it the most efficient cooking tool they can, and they have set down in black and white just the very best way to use it most effectively.

Managing your oven to the best advantage takes planning. The dishes you use should be selected so they will fit into the oven well, not touching each other nor the sides of the oven, and leaving a space for the circulation of air around the pans. Your manufacturer surely calls your attention to that. He may have done more. He may have furnished a set of pans that fit your oven exactly, using all of the space, but leaving plenty of room for the air to pass between them.

Use Oven to Full Capacity

Do not overheat your oven, nor heat it up before the food is ready to go in if you would be careful of current. Try always to use it to capacity when it is going. This means a whole oven cooked meal or cooking ahead for meals to come. Bake on the stored heat as it recedes by following the first baking with foods that bake at a lower temperature.

While the baking is going on, keep the door closed and the heat shut in. An oven with a regulator need not be watched. You watch the clock instead.

If you have a cooker sunk in an insulated well in place of one of the surface burners on your range, you will find it economical to make use of it for steaming, and long slow cooking, because it uses less current than the other burners.

Proper dishes will help you save on fuel when you cook on top of the stove. Range manufacturers recommend using utensils exactly the same diameter as the unit, flat bottomed, straight sided utensils, with close fitting covers. If you have double or triplicate pans, and the size of your family permits, you can cook two or three foods on the same burner with the same current you would ordinarily use for one.

Save Current by Cooking with a Minimum Amount of Water

Cook your vegetables in a small amount of water, and you will not only conserve the fine flavor and keep their mineral salts but you will save time and current. You know yourself that it takes less time and less current to bring half a cup or a cup of water to a boil than four or five.

Turn the switches to "medium" or "low" after the cooking is fairly started. Study your own range for this. Most burners will keep food boiling indefinitely on low, and many of them will maintain boiling for eighteen to twenty minutes after the current is turned entirely off.

Cooking potatoes, for instance, can be done by having the burner on "high" until steam coming out from under the lid shows that boiling is well under way, perhaps ten minutes, then turning the current off for the last twenty minutes of the cooking time.

None of these savings amount to much in themselves, but in the course of a year the "many mickles make a muckle" as my grandmother used to say.

PUTTING THE FIRE INTO THE FRYING PAN

BECAUSE we like doughnuts and fried cakes, and twisty jam filled crullers, because we like the crunchy crust of foods fried in deep fat, I have been eying with a good deal of interest two new kettles for deep fat frying that have recently come on the market.

Like other small electric cookers they are double walled containers with a packing of insulation between the walls. They do not differ much in size from them either, but they carry

more current than the ordinary cookers for theirs is the very special job of heating fat just right for frying.

Both fryers have long handled wire baskets just big enough to set down into the hot fat and hold the foods and to lift them out when they are fried.

The larger of these fry kettles, an attractive chromium and black affair, holds five quarts. Its heating element is built into the walls, so it surrounds the well of the kettle from top to bottom. This fryer provides two heats, the higher of them taking 750 watts.

The other fryer is slightly smaller, just four quarts. It is covered with a clean looking green enamel. There are two models of this kettle, one wired for 600 and the other for 1200 watts. The larger wattage was primarily designed for quick lunch counters and barbecues rather than the home kitchen, but it would have the advantage of giving extra speed there.

While I have not tested it, I should not think that for the same job, it would use any more current than the other, because both fryers are thermostatically controlled to keep the fat at a temperature of approximately 400 degrees. The thermostat cuts the current off at 400 or 405 and turns it back when the fat cools as low as 390 degrees, keeping the hot fat at exactly the right temperature for perfect frying, without danger of overheating, or cooling so the food soaks grease.

Just as extra, but incidental virtue, by keeping the fat from overheating, it protects it from any possible danger of catching fire, and by turning the current off promptly when the proper heat is reached, it saves electricity.

The manufacturers claim that keeping the fat at this temperature sears the food so quickly when it goes into the fat that the juices and odors of the food do not leak into the fat which can be used again and again.

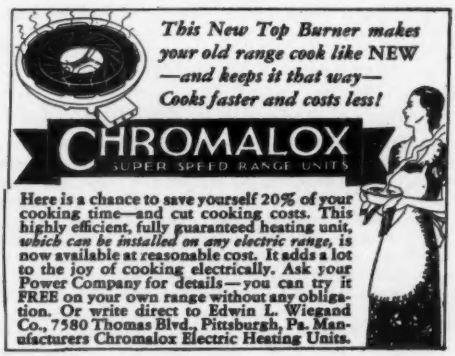
Putting Up Green Feed

(*Continued from page* 12)

years old, but new fan blades were installed two years ago."

When asked if the cutting down of the speed of the ensilage cutter would not cause a lot of trouble with clogging, Mr. Guitteau's answer was, "Not if the silo pipe is straight, the belt loss negligible, and the voltage holds up under full load."

"You know," Mr. Guitteau said in explaining the advantages of using a small electric motor, over a large one or a tractor for the silo filling job, "I have used both a tractor, a 7½ h.p. electric motor, as well as a 5 h.p. electric motor, but I can see no advantage in using either the tractor or the 7½ h. p. motor over the 5 h.p. motor because the load on the cutter with one man feeding all he can ordinarily handle is well within the capacity of the 5 h.p. electric motor. You can operate efficiently with a small crew, letting the silage settle as you fill, thus increasing the



This New Top Burner makes your old range cook like NEW *—and keeps it that way— Cooks faster and costs less!*

CHROMALOX
SUPER SPEED RANGE UNITS

Here is a chance to save yourself 20% of your cooking time—and cut cooking costs. This highly efficient, fully guaranteed heating unit, *which can be installed on any electric range,* is now available at reasonable cost. It adds a lot to the joy of cooking electrically. Ask your Power Company for details—you can try it FREE on your own range without any obligation. Or write direct to Edwin L. Wiegand Co., 7580 Thomas Blvd., Pittsburgh, Pa. Manufacturers Chromalox Electric Heating Units.

ESCO *The Electric* MILK COOLER

increases profits, cuts costs, saves labor. Cools milk quickly to below 50 degrees and keeps it cold until shipped.

The ESCO Electric Dairy Utensil Sterilizer destroys bacteria as it dries cans and pails. An automatic time and profit saver.

Send for information. Ask also about ELCO Electric Water Heaters.

ESCO CABINET CO.
170 East Market Street
WEST CHESTER, PA.

tonnage of feed in the silo. Also the power cost per ton is lower with a small motor.

"My silage filling crew does not amount to much, but I get the silage in the silo mighty cheap. I keep one regular man on the place and he puts in about 6 hours a day on this job. I hired one extra man and worked some myself, then a severe wind storm tangled the corn when we were about one-third done, so I put on a second extra man and did very little myself. When we nearly reached the top of the silo I let both extra men go and my regular man and I put in a few loads every day to compensate for settling. My cash outlay for labor for 25 feet of completely settled ensilage in a 14-foot silo was $23.50. Compare that with my 1930 cost when I used tractor and put 15% less silage in the silo at a labor cost of $102.00.

"Why, the energy consumption in filling the silo with a 5 h.p. motor in 1932 was only 108 kilowatt hours all told. The saving in the cost of operating the electric motor was less than one-quarter of the cost of operating the tractor to do the same job. So my saving in using a small electric motor rather than a tractor was $83.29 or 75% of the actual cash outlay I normally spent when using a tractor and a large crew to operate it economically."

I asked Mr. Guitteau if he did not think the most important factor in the successful use of a small motor for filling a silo is the desire and ability of the farmer to accomplish the job with the equipment at hand, and here is the answer:

"Any farmer has the ability to do this with the equipment at hand or readily procurable but he must be willing to put in an extra few minutes maintaining perfect adjustment of equipment.

"And it does not take a long time to fill the silo either with a 5 h.p. motor, in case of emergency demanding speed in completing the job.

"I tried to bet a neighbor that by enlarging the crew to 6 men I could put 40 tons in the silo in an 8 hour day. After timing a couple of loads he did not take the bet."

We fellows working in farm electrification work, assisting farmers to cut down their cost of production, and do things easier by using electricity, sometimes think, that we are doing a whale of a good job in devising new and improved uses of electricity on the farm; but when I was driving away from Mr. Guitteau's place I was thinking, that we wouldn't accomplish very much along this line, if it weren't for such farmers as Mr. Guitteau who are successfully working out their own problems and developing information which we take from them and pass on to their neighbors.

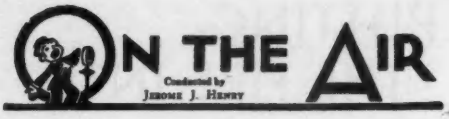
NEW DUAL USE!

WOOD'S ELECTRIC FEED GRINDER

Grinds grain and operates other equipment.

ASK YOUR ELECTRIC COMPANY about this money and labor saver.

W. C. WOOD CO., LTD., TORONTO, CANADA



4-H Members in Radio Program August 5

DELAWARE and Indiana 4-H club members speaking in the National 4-H club program, a regular feature on the first Saturday of each month, during the National Farm and Home Hour, will review the benefits they received from 4-H club tours, on Saturday, August 5.

In the same program Reuben Brigham, U. S. Department of Agriculture extension service, will tell about "What's Doing Among 4-H Clubs," and a state leader from Indiana is to add to the discussion of 4-H tours.

The United States Marine Band, directed by Captain Taylor Branson, will play a variety of musical selections by world famous composers. Among these will be Debussy's "En Bateau," Rubenstein's "Romance," and Bizet's "Toreador Song."

Other Special Farm and Home Hour features will be heard during August on the following dates, at 12:30 p.m., eastern standard time:

August 12—American Farm Bureau Federation program
August 14—Future Farmers program
August 16—Land Grant College program
August 19—National Grange program
August 26—Farmers' Union program.

• • •

"The County Fair" a Popular Radio Feature

ONE of the outstanding Saturday night radio features is The Country Fair, broadcast through station KMOX in St. Louis, one of the stations in the Columbia Broadcasting System network. This feature has a cast of about 70 entertainers and runs over a long period of time on Saturdays.

Designed to duplicate many of the features of the old time county fair which was so well known in rural communities, the program on the air is most entertaining.

With the gain in popularity of the broadcast, members who participate in the cast have made many personal appearances on the stage within a wide radius from St. Louis.

In addition to being a really outstanding feature, The County Fair provides listeners with a "different" type of program which is strictly entertaining and furnishes a pleasant diversion for Saturday evening gatherings in both town and country.

• • •

Amos 'n' Andy Are in Their Sixth Year

AMOS 'n' ANDY chalked up a half decade of life about a month ago. It is now more than five years since Freeman F. Gosden and Charles J. Correll created the pair of characters as a fifteen minute feature over station WMAQ in Chicago. The following fall saw them on the network with their present sponsor. They were the first fifteen minute program to go on a network and were the first to broadcast six evenings each week.

In all the five years they have only missed two scheduled broadcasts, and those were while they

were on the way to Hollywood, California, where they made a talking picture. Twice they have broadcast from the sickbed against doctor's orders. During the summer they have broadcast from their vacation spots by having special lines run to their favorite recreation grounds.

Each of the Amos 'n' Andy episodes contains from 1,500 to 2,000 words. The total number of words they have used on the air amounts to some three million. The back scripts are bound into large volumes, of which there are eleven, each the size of a large dictionary.

• • •

Boy's Clothes Gets Job for Girl

MARLENE DIETRICH may have worn men's clothes to start a fad, but Ruth Durment did it to get herself a radio job. And she succeeded.

Not only that, but she concealed the fact that she's a girl so well that it was several weeks before those who worked with her discovered the fact.

Boake Carter, newspaperman and one of radio's leading news commentators. He first attracted radio attention when he went on the air to report the Lindbergh kidnapping.

Ruth, nicknamed "Tony," who is blonde and young looking for her 19 years, had some experience in school plays and wanted to get into radio drama. She was auditioned by a radio station and, because they were short of a juvenile, they cast her in the role of a young boy. The director asked her if she would mind wearing boys clothes in order not to destroy the illusion for the immediate audience.

She didn't mind. In fact she had always liked to play tomboy. Thereafter she came to the studios dressed as a boy. Then she decided to try her luck with one of the networks. When a cast was selected she was again given a boy's role. Production men said, "that young fellow seems promising."

Then one day the director asked her to "act more like a boy."

"Well, you see," she stammered, "That's a little difficult for me. I—I really am a girl."

The director nearly fainted. But the girl kept her job.

THE 50 FOREMOST WAYS for APPLYING ELECTRICITY!

Today there are hundreds of practical and successful applications for electricity on the farm. But those listed below are so important that every progressive farmer should know all about everyone. So start investigating today—picking first those that serve where help is needed most.

FOR THE HOUSEHOLD: Ranges (*see advt., inside front cover*)—Refrigerators—Clothes Washers—Vacuum Cleaners—Ironing Machines—Dishwashers—Flat Irons — Food Preparing Machines — Ice Cream Freezers—Sewing Machines—Table Appliances—Clocks—Range Replacement Units (*see advt., page* 15 *and inside front cover*).

FOR WATER SUPPLY: Automatic Water Systems (*see advt., page* 13)—Pump Jacks—Irrigation Systems—Water Softeners—Water Heaters (*see advts., inside front cover, page* 15).

FOR THE DAIRY: Milking Machines—Milk Coolers (*see advt., page* 15)—Cream Separators—Churns—Bottle Washers—Dairy Sterilizers (*see advt., page* 15)—Grooming Machines—Clipping Machines.

FOR POULTRY KEEPERS: Incubators—Brooders—Time Switches—Drinking Fountain Warmers—Ultraviolet Light.

FOR REPAIR AND MAINTENANCE: Soldering Irons—Tool Grinders — Drills—Paint Sprayers—Woodworking Machinery—Concrete Mixers—Motors.

FOR ENTERTAINMENT: Radio sets—Movie Projectors—Electrical Toys.

FARM MACHINES AND EQUIPMENT: Feed Grinders (*see advt., page* 16)—Ensilage Cutters—Corn Shellers—Hay Hoists—Feed Mixers—Fruit and Vegetable Graders — Stationary Spray Plants (*see advt., page* 13).

MISCELLANEOUS: Burglar Alarms—Floor Polishers——Ventilators—Hot Bed Heaters.

Many of your questions can best be answered by our advertisers. Read the advertisements carefully. If you can't get the information needed through them, fill out the handy coupon below.

TEAR OFF HERE

Electricity on the Farm, 24 W. 40th St., New York

Without cost to me, please have manufacturers send complete information on the following Electrically Operated Equipment which I am thinking of buying.

.....

.....

My name is .....

Address .....

..... 8-33

What's New

Reviewed by T. E. HIENTON

Insect Killer

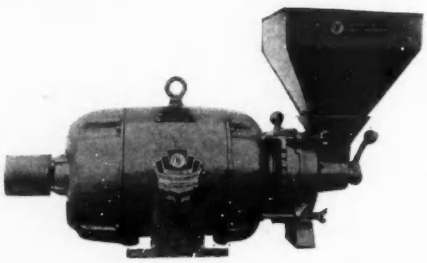
Killing insects by electric current or repelling them with light has been receiving much attention during recent years in an experimental way. Farmers have been interested in these experiments, particularly in orchards, because of the increasing attention being paid to poisonous spray residues and the necessity for removing them before sale of the fruit. Obviously, if lights or electrocuting devices or both will control insects injurious to fruit, spraying may be reduced and the need for removing poisonous residue eliminated.

New models of an insect killing or electrocuting device have been recently announced by an eastern manufacturer of such equipment. One model, available for 110-volt current, may be had for 60-cycle or 25-cycle operation. A 75-watt Type "C" Mazda lamp is used as the light lure. Arranged in a circle around the lamp is a series of vertical cadmium-plated wires ¼ inch apart, through which an electric current passes. High voltage for killing insects which touch the wires is provided from the secondary side of a transformer housed in a bell-shaped metal cover at the top of the wires. Total current used is 85 watts while that of another model of similar construction, using a "U"-shaped mercury vapor light tube as the light lure, is approximately 25 watts. The latter model is available only for 110 volt, 60-cycle operation.

Dual Use Feed Grinder

A new feed grinder, so designed that its motor can be used for operating other machines at the same time that feed is being ground has just been put on the American market. Canadian farmers have had considerable experience with this dual use machine which will produce from 100 to 400 pounds per hour, and are enthusiastic about the way it works. By means of a line shaft the one motor can be made to operate a water pump, root pulper, milking machine, cream separator, and other equipment, all at the same time as it grinds the feed.

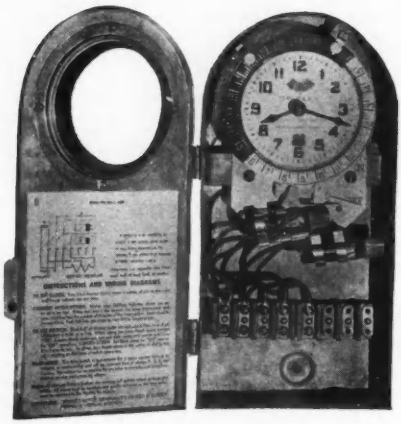
Little space is required for installation. Less than a foot in width and about two feet in length,



it can be mounted on top of the feed box or bolted to the ceiling or wall. Completely automatic operation for grinding feed can be arranged very easily. The starting switch may be located in any handy place. All parts are readily accessible making it easy to make adjustments, if necessary.

Motor-Driven Time Switch

Time switches are becoming increasingly important for use in farm electrical installations. Poultry house lighting, electric water heaters,



some soil-heating installations, and occasionally motors and pumps are controlled by time switches.

Announcement was recently made by an eastern manufacturer of a time switch with a self-starting synchronous motor made by a watch manufacturer. A Mercoid snap-action switch mechanism and Mercoid mercury tubes comprise the switch unit. Small set screws located on a 24-hour rim, rotating around the clock dial, are set at desired locations for On or Off.

Slightly Mixed

A political speaker, warning the public against the imposition of heavier tariffs on imports said, "If you don't stop shearing the wool off the sheep that lays the golden egg, you'll pump it dry."

Surplus

Teacher: "Where is the capital of the United States?"
Smart Student: "All over the world!"
—The Legion.

"Do you talk in your sleep?"
"No; my wife says I'm perfectly exasperating—I only smile."

Villager (showing stranger over famous cottage)—Three hundred years old this be, sir, and never a stick or stone altered in all them years.
Visitor—I've a landlord like that, too.

First Waiter: "I woke up that fellow three times and I'm not going to wake him up again."
Second Waiter: "Why don't you have him thrown out?"
First Waiter: "Nothing doing! Every time I wake him up he pays his bill."

Nothing Doing

A prominent man of Covington, Ky., ran for office this fall. He now holds a political job. The other day we heard the following.

"Mr. Blank, are you going to take a vacation this year?"

"Yes. If I am elected again this year, I will take another two years' rest."

JUNE COVER

COVER TITLE CONTEST

WINNERS FOR JUNE

1st PRIZE $20

" Electric baking, everything good,
Nobody yelling, 'Bring some wood'!"

JULIA S. BUTLER, R. 2, Waterport, N. Y.

Nine $2.00 Cash Prizes

" Hot biscuits! Hully gee!
Quicker'n scat with electricity."
CECIL H. BROWN, P. O. Box 271, Needles, Calif.

" Mother bakes the electric way,
Keeping cool on hottest day."
DAN REGAN, R. 2, Camden, N. Y.

" Boy with wishing watchful look,
Watches this modern electric cook."
VIDA E. DEARTH, R. 8, Muncie, Ind.

" Quick, efficient, economical and clean,
The electric range—household queen!"
MRS. C. B. PEDERSEN, R. 1, Eugene, Ore.

" Ma sure rustles some swell chow,
Her kitchen's electric now!"
MRS. J. O. PETERSON, Warwick, Mass.

" Range — servant indeed — efficiency—
economy—kitchen coolness—and speed."
MRS. FLORENCE M. MURPHY, R. 5,
Box 120, Mt. Vernon, Wash.

" This kitchen, electrically run,
Equally delights mother and son."
E. J. O'DONNELL, Old Worcester Rd., Barre, Mass.

" Electricity has immortalized
'Biscuits like Mother used to bake'."
MRS. C. G. PAGE, R. 4, Marshall, Mo.

" Electrically baked, electrically timed,
Makes best cakes in baking line."
MARTHA WENGER, R. 5, Goshen, Ind.

RULES
for
AUGUST CONTEST

Titles should not be longer than 10 words—the shorter the better —and they need not be rhymes.

Ten cash prizes will be awarded for the 10 best titles for the picture on the front cover.

The first prize will be $20 cash and nine second prizes of $2 in cash will be awarded.

In case of a tie, each winning contestant will receive the full cash prize to which he or she is entitled.

All members of the farm family to whom this magazine was sent may submit titles, but each contestant may submit only one title.

Question "A" must be answered correctly.

Send your title on the coupon below or make out a similar form on a plain sheet of paper or government post card.

Entries must be sent to the Title Editor, ELECTRICITY ON THE FARM, 6 North Michigan Avenue, Chicago, Illinois, before September 1st.

Winning names and titles will be announced in the October issue.

My title for the August Front Cover picture of ELECTRICITY ON THE FARM is .....

.....

.....

(a) What is the name and address of your favored dealer (not Power Co.) who sells electrical equipment?

.....

.....

My name is ..... R.F.D. .....

Post Office ..... County ..... State .....

8-33

THE WAY PRICES ARE GOING—FARMERS WILL SOON BE ON TOP OF THE WORLD

AT last farmers are coming into their rightful heritage. Farm commodity prices are rising faster than the general price trend.

Here's what the Bureau of Agricultural Economics of the U.S.D.A. reports:

> *"The ratio of prices received by farmers to prices paid shows a rise in the value of the farmers' dollar from 48% of prewar to 62% just one year later."*

THE time has come for farmers to move forward with confidence—to install modern labor-saving equipment for most efficient farm operation—to banish drudgery from the home by substituting electrical servants that never shirk.

ASK YOUR ELECTRIC COMPANY

any questions about the application of electricity that are not answered in this monthly magazine, or write:

Electricity on the Farm

6 N. Michigan Ave., CHICAGO 24 W. 40th St., NEW YORK

T